Logistics Management Institute

Requirements Analysis — Defense Commissary Agency Credit Card Program
Credit Card Terminals and Printers

CA303LN32

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DTIC QUALITY INSPECTED 4

Approved for public release;
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19970122 103

LMI

November 1995

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Preface

On 1 June 1995, we presented the Defense Commissary Agency (DeCA) with a draft version of this *Requirements Analysis*. The document recommended system requirements for DeCA's Credit Card Program. Based on those recommendations, DeCA has procured and installed a credit card terminal and printer in every commissary in the United States. However, due to unforeseen circumstances, DeCA was unable to return an edited version of the draft document until 1 November 1995. This final *Requirements Analysis* reflects those editorial comments. Because the procurement and installation is complete, the document is written in the past tense.

Requirements Analysis — Defense Commissary Agency Credit Card Program — Credit Card Terminals and Printers

INTRODUCTION

This report presents the functional and technical requirements that the Defense Commissary Agency (DeCA) used to procure credit card terminals and printers for its Credit Card Program. It also documents the compatability-limited requirements that allowed DeCA to acquire this equipment from NationsBank without soliciting competitive bids.

After installing the credit card terminals and printers, DeCA was able to modify its business practices. It now accepts credit cards from Nonappropriated Funds (NAF) and Appropriated Funds (AF) activities for grocery purchases, and from vendors as payment for vendor credit memorandums. As a result, DeCA was able to significantly improve its funds management and reduce operating costs and vendor payment problems.

1. INFORMATION NEEDS

The credit card terminals and associated printers satisfied the following DeCA information needs:

◆ Collect both electronic data and hard copies of

► credit card account number,

► expiration date,

► name of cardholder, and

► amount of transaction.

◆ Use the data printed by the credit card equipment to

► record payment of VCMs and NAF and AF sales,

► enter data into DeCA and DFAS financial systems, and

▶ create a record of deposit and deposit ticket for daily bank deposits.

The use of credit card terminals has enabled DeCA to effectively meet its information requirements, reconcile VCMs and NAF and AF charges more efficiently, and reduce administrative costs.

2. SYSTEM LIFE

DeCA expects to use the credit card terminals and printers for approximately three years. It completed fielding the equipment on 1 October 1995. Commissaries will use the equipment until it is replaced with new equipment acquired through DeCA's Point of Sale Modernization (POS-M) Program. DeCA plans to deploy POS-M in all commissaries worldwide beginning in March 1996, with completion scheduled for June 1998.

3. DESCRIPTION OF REQUIREMENTS

The functional and technical requirements of the credit card terminals and printers are detailed in the following subsections.

3.1 Functional Requirements

The functional requirements of the credit card terminals and printers were as follows:

◆ Process the following transaction types:

▶ sales;

▶ returns;

▶ voids;

▶ authorizations only, does not update terminal totals; and

▶ forced draft capture, manual entry of authorization number, credit card data, and amount after receiving a voice authorization.

◆ Accept entry of transaction data.

◆ Provide prompt and error messages to lead an operator through a transaction.

◆ Transmit and receive formatted requests for authorization and corresponding responses using American Banking Association (ABA) standards.

- Show authorization response codes and other responses on the terminal's display.

- Print two copies of charge-sale drafts, with signature line, either by printing two copies or using carbonless paper tape.

- Hold a telephone line open for up to 30 seconds after a response is received to process another transaction without redialing.

- Store transaction data until batch-balancing function is completed.

- Perform batch-balancing function at close of business day to ensure that all transactions were captured properly.

- Instruct only authorized DeCA installation personnel to program the credit authorization terminals with telephone numbers and other required data.

- Ensure that the credit authorization terminal and printer were successfully tested during the installation process.

- Perform remedial maintenance to repair terminals and printers, as required.

- Provide instructions and telephone numbers for processing credit card transactions manually if the system fails.

3.2   Technical Requirements

The technical requirements of the credit authorization terminals were as follows:

- Magnetic stripe reader that reads ABA tracks 1 and 2 of a credit card

- Keyboard with numeric and function keys

- Minimum 8-character display

- Interface to telephone network

- Internal modem with automatic dialing capability

- Interface to a sales draft printer.

DeCA also required a sales draft printer that prints charge-sale drafts using ABA standard formats.

4. COMPATIBILITY — LIMITED REQUIREMENTS

NationsBank has programmed the Verifone model Transz330 credit authorization terminals and Model 250 printers with the merchant identification numbers and other DeCA-unique identification information at no additional cost to DeCA. NationsBank provides guaranteed maintenance and service on all Verifone devices in support of the various DeCA missions that utilize them. All devices interface with NationsBank's software so that the transfer of funds to DeCA's Treasury accounts occurs the next business day. An initial study performed within DeCA using equipment provided by NationsBank enabled the agency to improve its financial management in the areas where credit card vendor transactions are utilized. The Credit Card Program has reduced the burden on DFAS and reduced DeCA's administrative workload. DeCA determined that to meet interoperability requirements and to reduce training lead-time, it was in its best interest to continue the use of the same equipment throughout the organization within the Continental United States. DeCA is utilizing this equipment until a new Point of Sale system is installed at each location.

5. SECURITY REQUIREMENTS

To meet security requirements, the credit card terminal and printer are located in an administrative area of the commissary that

◆ protects the equipment and media from air contaminants, static electricity, power surges and brownouts, fire, and food or liquid spillage; and

◆ provides physical security, such as a lockable drawer, to protect the credit card information printed on the charge-sale drafts from unauthorized access.

6. ACCESSIBILITY REQUIREMENTS FOR INDIVIDUALS WITH DISABILITIES

All credit card hardware is located in an administrative area within every commissary that is readily accessible to all authorized personnel. The placement of equipment to allow access by individuals with disabilities is handled on an as-needed basis.

The credit card terminals do not provide access to telecommunications equipment for hearing- and speech-impaired individuals. DeCA will address the requirements for such access also on an as-needed basis.

7. SPACE AND ENVIRONMENTAL REQUIREMENTS

The credit card terminals and printers operate within normal ranges for heat and humidity. They are located to allow access to telephone lines and electrical power. The equipment does not require any special electrical wiring, such as a dedicated circuit.

8. WORKLOAD AND RELATED REQUIREMENTS

A typical commissary processes no more than 10 NAF, AF, VCM, and distributor credit card transactions per day, with each taking no more than 90 seconds to process. DeCA does not expect to expand the system beyond the current requirement of one terminal and printer per commissary and service center.

If the system fails, DeCA uses manual instructions provided by NationsBank to process credit card transactions manually and receive voice authorizations. DeCA personnel reenter the transactions using forced draft capture when the system is restored.

9. RECORDS MANAGEMENT

The DeCA Credit Card Program has reduced paperwork, improved funds management, and met the data security needs of "The Privacy Act of 1974."

◆ Storing daily VCM, distributor credit, and NAF and AF sales transaction data electronically

◆ Performing daily batch balancing to ensure that all transactions are captured

◆ Printing two copies of each charge-sale draft — one for either the vendor, distributor, or NAF and AF representative, and one for record retention

◆ Securing sales drafts in a lockable drawer to protect credit card information from unauthorized access.

REPORT DOCUMENTATION PAGE

Form Approved
OPM No.0704-0188

1. AGENCY USE ONLY *(Leave Blank)*	2. REPORT DATE	3. REPORT TYPE AND DATES COVERED
	November 1995	Final

4. TITLE AND SUBTITLE

Requirements Analysis — Defense Commissary Agency Credit Card Program — Credit Card Terminals and Printers

5. FUNDING NUMBERS

C MDA903-90-C-0006

PE 0902198D

6. AUTHOR(S)

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8. PERFORMING ORGANIZATION REPORT NUMBER

LMI– CA303LN32

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10. SPONSORING/MONITORING AGENCY REPORT NUMBER

11. SUPPLEMENTARY NOTES

12a. DISTRIBUTION/AVAILABILITY STATEMENT

A: Approved for public release; distribution unlimited

12b. DISTRIBUTION CODE

13. ABSTRACT *(Maximum 200 words)*

This report analyses the Defense Commissary Agency's (DeCA's) funtional and technical requirements for credit card terminals and printers. It follows the format outlined in the Federal Information Resources Management Regulation. As a result of this analyses, DeCA purchased equipment from NationsBank under its contract with the Department of Treasury.

14. SUBJECT TERMS

Defense Commissary, credit card terminals, DeCA, requirements NationsBank, Defense Finance and Accounting Service, DFAS

15. NUMBER OF PAGES

8

16. PRICE CODE

17. SECURITY CLASSIFICATION OF REPORT	18. SECURITY CLASSIFICATION OF THIS PAGE	19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
Unclassified	Unclassified	Unclassified	UL